

In the Claims

1. (Withdrawn) The method as claimed in claim 26, wherein the wafer cap comprises a wafer cover tape and a perforated tape.
2. (Withdrawn) The method as claimed in claim 26, wherein the layer of dicing tape has a UV releasable adhesive.
3. (Withdrawn) The method as claimed in claim 26, wherein the layer of dicing tape is applied to the back side of the MEMS wafer after the wafer cap is mounted on the MEMS wafer.
4. (Withdrawn) The method as claimed in claim 26, wherein the layer of dicing tape is applied to the back side of the MEMS wafer before the wafer cap is mounted on the MEMS wafer.
5. (Withdrawn) The method as claimed in claim 26, wherein the wafer cap comprises a wafer cover and a spacer layer.
6. (Withdrawn) The method as claimed in claim 5, wherein the spacer layer comprises a flexible film with an adhesive medium on one side.
7. (Withdrawn) The method as claimed in claim 6, wherein the flexible film is transmissive to UV radiation.
8. (Withdrawn) The method as claimed in claim 5, wherein the wafer cover is a cover tape.
9. (Withdrawn) The method as claimed in 5, wherein a height of the spacer layer prevents the wafer cover from deflecting in such a manner to come in contact with the MEMS structures.

10. (Withdrawn) The method as claimed in 5, wherein a height of the spacer layer prevents electrostatically induced damage to the MEMS wafer.

11. (Withdrawn) The method as claimed in 5, wherein a height of the spacer layer prevents electrostatically induced damage to the MEMS wafer and prevents the wafer cover from deflecting in such a manner to come in contact with the MEMS structures.

Claims 12-23 (Cancelled)

24. (Withdrawn) The method as claimed in claim 26, wherein the layer of transfer tape is applied to the dicing tape after the said layer of dicing tape and the laminated MEMS wafer are sawn.

25. (Withdrawn) The method as claimed in claim 1, wherein the wafer cover tape comprises a static dissipative material.

26. (Currently Amended) A method for protecting a MEMS wafer during a dicing, comprising:

(a) mounting, upon a backside of a the MEMS wafer, a layer of dicing tape, the MEMS wafer having a plurality of MEMS structure sites on a front side and a plurality of through holes, each through hole corresponding to a MEMS structure site, the through holes being formed such that each through hole penetrates through the wafer from the backside of the wafer to the front side;

(b) mounting, upon the front side of the MEMS wafer, prior to dicing, a wafer cap to produce a laminated MEMS wafer, the wafer cap having a first side and a second side, the first side being opposite of the second side, the first side of the wafer cap being recessed in areas corresponding to locations of the MEMS structure sites on the MEMS wafer, the second side of the wafer being substantially planar;

(c) dicing the MEMS wafer into a plurality of dies such that each die includes a MEMS structure site and a corresponding through hole; and

(d) mounting, upon the dicing tape, a layer of transfer tape.

27. (Original) The method as claimed in claim 26, wherein the layer of dicing tape has a UV releasable adhesive.

28. (Original) The method as claimed in claim 26, further comprising the step of:

(d) removing the individual diced dies from the wafer.

29. (Original) The method as claimed in claim 28, wherein individual dies are removed by initially exposing the dicing tape to UV radiation and disengaging the dies from the dicing tape with a die ejection needle assembly.

Claims 30-32 (Cancelled)

33. (Withdrawn) The method as claimed in claim 1, wherein the wafer cover tape includes an adhesive medium.

34. (Withdrawn) The method as claimed in claim 33, wherein the adhesive medium is an ultraviolet light releasable medium.

35. (Withdrawn) The method as claimed in claim 33, wherein the adhesive medium is a heat releasable medium.

36. (Withdrawn) The method as claimed in claim 33, wherein the adhesive medium is a combination of an ultraviolet light and heat releasable medium.

37. (Withdrawn) The method as claimed in claim 33, wherein the adhesive medium comprises a thermoplastic organic material.

38. (Withdrawn) The method as claimed in claim 33, wherein the adhesive medium comprises an ultraviolet light sensitive organic material.

Claim 39 (Cancelled)

40. (Withdrawn) The method as claimed in claim 1, wherein the perforated tape comprises a tape having adhesive on two sides and a flexible film.

41. (Withdrawn) The method as claimed in claim 1, wherein the perforated tape comprises a flexible film with an adhesive medium on one side.

42. (Withdrawn) The method as claimed in claim 40, wherein the flexible film is transmissive to UV radiation.

43. (Withdrawn) The method as claimed in claim 41, wherein the flexible film is transmissive to UV radiation.

44. (Withdrawn) The method as claimed in 1, wherein a height of the perforated tape prevents electrostatically induced damage.

45. (Withdrawn) The method as claimed in claim 1, wherein the perforated tape comprises a plurality of layers of perforated tape, an aggregate of the plurality of layers of perforated tape producing the height to prevent electrostatically induced damage.

Claims 46-60 (Cancelled)